



EMBARGOED FOR RELEASE until April 14, 2016 – 5:00 PM (ET)

Contacts: Tracy Hampton • (312) 339-9067 • thampton@nasw.org Bob Henkel • (202) 557-8360 • bhenkel@asn-online.org

COMMONLY USED REFLUX AND ULCER MEDICATION MAY CAUSE SERIOUS KIDNEY DAMAGE

Proton pump inhibitors should be used only when necessary and should not be taken long-term

Highlights

- Patients who took proton pump inhibitors for heartburn, acid reflux, or ulcers had an increased risk of kidney function decline, chronic kidney disease, and kidney failure.
- The longer patients took the drugs, the greater their risk.

Proton pump inhibitors are widely used, overprescribed, and generally perceived as safe.

Washington, DC (April 14, 2016) — New research indicates that long-term use of certain medications commonly used to treat heartburn, acid reflux, and ulcers can have damaging effects on the kidneys. The findings come from a study appearing in an upcoming issue of the *Journal of the American Society of Nephrology* (JASN).

In 2013, an estimated 15 million Americans were prescribed proton pump (PPIs), which reduce gastric acid production. This number is likely an underestimate because the medications are also available over-the-counter and can be purchased without prescription.

To assess the safety of this widely used drug class, a team led by Yan Xie, MPH and Ziyad Al-Aly, MD, FASN (Clinical Epidemiology Center at the VA Saint Louis Health Care System and Washington University in Saint Louis) analyzed information from the Department of Veterans Affairs national databases. The investigators identified 173,321 new users of PPIs and 20,270 new users of histamine H2 receptor blockers, an alternative class of drugs also used to suppress stomach acid. Over 5 years of follow-up, those taking PPIs were more likely to experience kidney function decline than those taking H2 receptor blockers. PPI users also had a 28% increased risk of developing chronic kidney disease and a 96% increased risk of developing kidney failure. Furthermore, there was a graded association between duration of PPI use and risk of kidney problems, with those who took PPIs for a longer time being more likely to develop kidney issues.

The findings suggest that long-term use of PPIs may be harmful to the kidneys and should be avoided. PPI use may not only increase the risk of developing chronic kidney disease, but may also increase the risk of its progression to complete kidney failure. "The results emphasize the importance of limiting PPI use only when it is medically necessary, and also limiting the duration of use to the shortest duration possible," said Dr. Al-Aly." A lot of patients start taking PPIs for a medical condition, and they continue much longer than necessary."

The results also provide insights for future investigations on drug safety. "The study serves as a model to leverage the availability of Big Data—with VA data being a prime example—and advanced analytics to determine long term safety profiles of commonly used medications and promote pharmacovigilance," said Xie.

Study co-authors include Benjamin Bowe, MPH, Tingting Li, MD, Hong Xian, PhD, and Sumitra Balasubramanian, MS.

Disclosures: The authors reported no financial disclosures.

The article, entitled "Proton Pump Inhibitors and Risk of Incident and Progression of Chronic Kidney Disease and ESRD," will appear online at http://jasn.asnjournals.org/ on April 14, 2016, doi: 10.1681/ASN.2015121377.

The content of this article does not reflect the views or opinions of The American Society of Nephrology (ASN). Responsibility for the information and views expressed therein lies entirely with the author(s). ASN does not offer medical advice. All content in ASN publications is for informational purposes only, and is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This content should not be used during a medical emergency or for the diagnosis or treatment of any medical condition. Please consult your doctor or other qualified health care provider if you have any questions about a medical condition, or before taking any drug, changing your diet or commencing or discontinuing any course of treatment. Do not ignore or delay obtaining professional medical advice because of information accessed through ASN. Call 911 or your doctor for all medical emergencies.

Founded in 1966, and with nearly 16,000 members, the American Society of Nephrology (ASN) leads the fight against kidney disease by educating health professionals, sharing new knowledge, advancing research, and advocating the highest quality care for patients.

###

Tweet: Commonly used reflux and ulcer medication may cause serious kidney damage. http://www.bit.ly/ASN-XXXX. Author's Twitter handle: @zalaly

Facebook: New research indicates that long-term use of certain medications commonly used to treat gastroesophageal reflux disease and peptic ulcers can have damaging effects on the kidneys. The findings come from a study in the *Journal of the American Society of Nephrology*.

The American Society of Nephrology[®], ASN[®], Kidney Week[®], CJASN[®], JASN[®], NephSAP[®], and ASN Kidney News[®] are registered trademarks of ASN

&&

At the VA: Our public Affairs Officer's name is Ms. Marcena Gunter. Email: <u>Marcena.Gunter@va.gov</u>

At Washington University School of Medicine: <u>https://medicine.wustl.edu/news/media-releases/</u>

Judy Martin Finch Director for Media Relations Mobile: 314-750-4213 Office: 314-286-0105 martinju@wustl.edu

Diane Duke Williams Associate Director for Media Relations Mobile: 314-750-2318 Office: 314-286-0111 williamsdia@wustl.edu